

Features

- Low forward voltage drop
- High reverse voltage
- Hermetic metal cases with ceramic insulators

Typical Applications

- All purpose high power rectifier diodes
- High power resistance welding equipment
- Non-controllable and half-controllable rectifiers
- Controlled rectifiers

I_{F(AV)} **5650A**
V_{RRM} **4300~5000 V**
I_{FSM} **58 kA**
I²t **16820 10³A²S**



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T _j (°C)	VALUE			UNIT
				Min	Type	Max	
I _{F(AV)}	Mean forward current	180° half sine wave 50Hz Double side cooled,	150			5650	A
V _{RRM}	Repetitive peak reverse voltage	tp=10ms	150	4300		5000	V
I _{RRM}	Repetitive peak current	at V _{RRM}	150			300	mA
I _{FSM}	Surge forward current	10ms half sine wave	150			58	kA
I ² t	I ² t for fusing coordination	V _R =0.6V _{RRM}				16820	A ² s*10 ³
V _{FO}	Threshold voltage		150			0.91	V
r _F	Forward slope resistance					0.10	mΩ
V _{FM}	Peak forward voltage	I _{FM} =5000A, F=108kN	150			1.41	V
Q _{rr}	Recovery charge	I _{FM} =2000A, tp=2000μs, di/dt=-20A/μs, V _R =50V	150		9000		μC
R _{th(j-c)}	Thermal resistance Junction to case	DC double side cooled Clamping force 108kN				0.0050	°C /W
R _{th(c-h)}	Thermal resistance case to heat sink					0.0015	
F _m	Mounting force			81		108	kN
T _{stg}	Stored temperature			-40		160	°C
W _t	Weight				2000		g
Outline		P48					

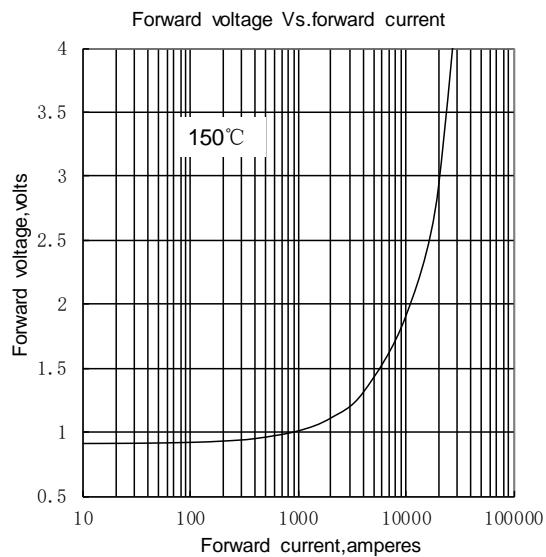


Fig.1

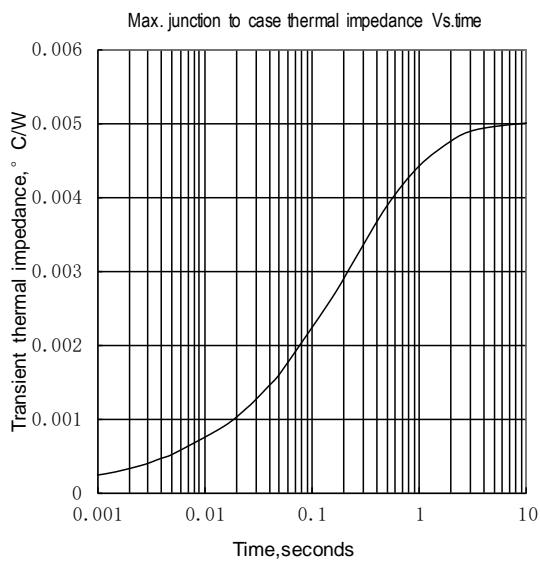


Fig.2

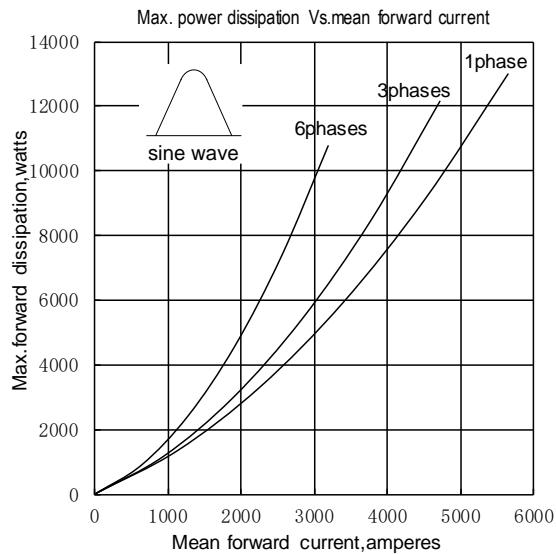


Fig.3

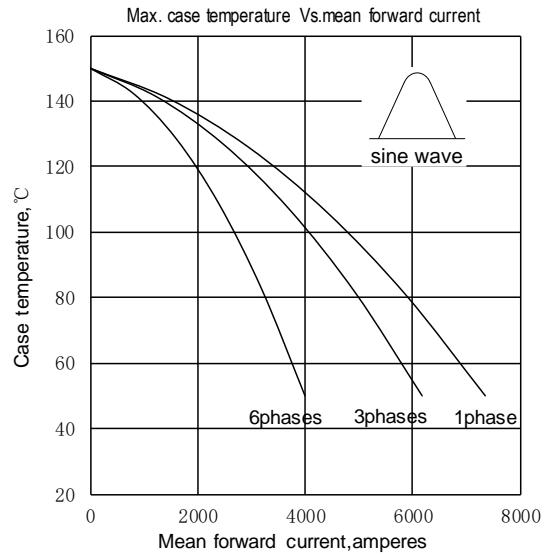


Fig.4

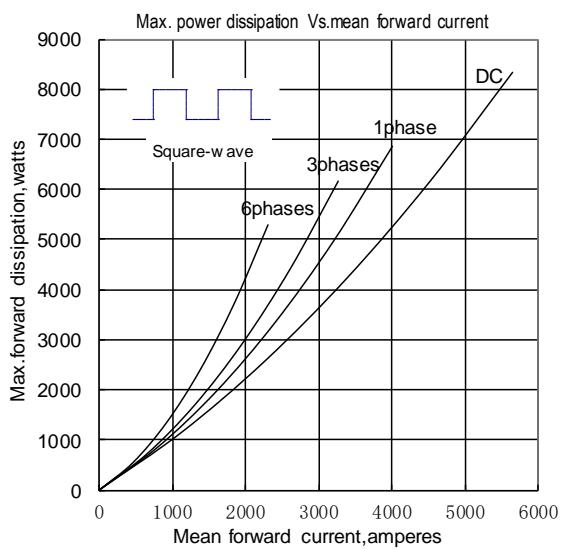


Fig.5

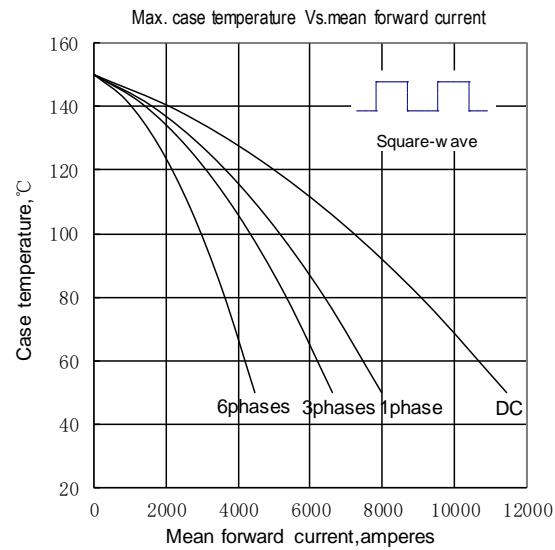


Fig.6

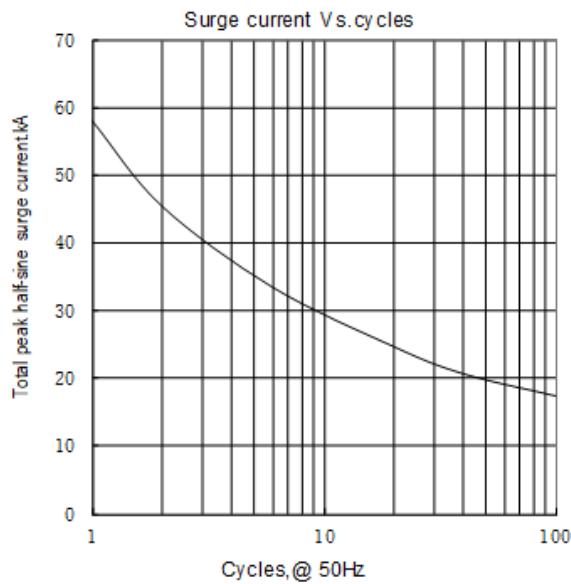
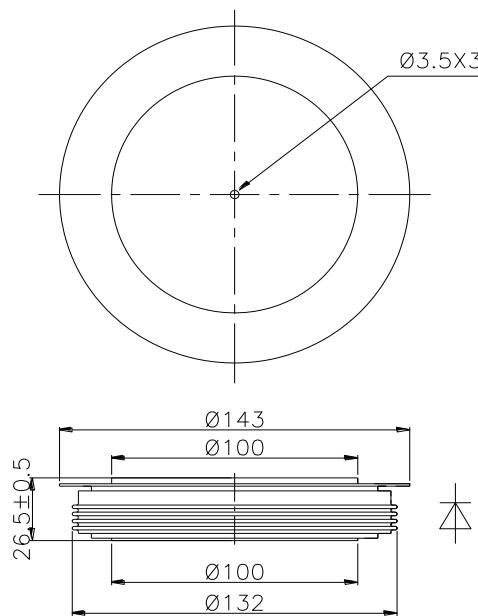


Fig.7



Nlps reserves the right to change specifications without notice.